

## TOUCH SENSOR WITH LINEARIZED RESPONSE

### Abstract of the Disclosure

A pattern for linearizing an electric field and a touch sensor incorporating same are disclosed. The touch sensor includes an electrically resistive film that covers a touch sensitive area. The touch sensor further includes two or more substantially parallel polygonal rows of electrically conductive segments disposed on the resistive film and surrounding the touch sensitive area. Each edge of each row has one or more middle electrically conductive segments disposed between two end electrically conductive segments. Gaps separate adjacent conductive segments in a row. A middle conductive segment in a row fully overlaps a middle conductive segment in an adjacent row. The overlap defines a full overlap region. The touch sensor further includes a discrete electrically insulative segment disposed in the resistive film in the full overlap region. The insulative segment increases the electrical resistance between the two middle conductive segments.